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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

PHAM, HAI CHI

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2861

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,065

Applicant(s)

HENDRICKS ET AL.

Examiner

Hai C Pham

Art Unit

2861

MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-10, 13, 15, 18-21 is/are rejected.
- 7) ☒ Claim(s) 3, 11, 12, 14, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities:
 - Line 15, "the carriage bearing structure" should read --a carriage bearing structure-- since such structure is defined for the first time in the claim.Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

- The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).
3. Claims 1-2, 4-10, 13, 15, 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Askren et al. (U.S. 6,386,681 B1).

Askren et al. discloses a carrier assembly (20) for use in an ink jet printing device, the carrier assembly comprising a body (28) having bearing structure configured to support the carriage for movement along a reference track (along the guide rods 16 and 18), and a printhead (printhead assemblies 22, 24) anchored to the body, and aligned directly relative to the carriage bearing structure each of the printhead assemblies 22 and 24 being provided with bearing members 184A-D at the base 160 defining the points of contact with the surface of the guide rod 18) (Figs. 3 and 5).

With regard to claims 2, 8, 15, 19, Askren et al. further teaches a frame (14), a carriage rail anchored, and datumed relative, to the frame (guide rods 16 and 18 being anchored or fixed to the frame 14 of the printing device), a printhead carrier (printhead interface assemblies 146A and 146B for the respective color and mono printheads) including an integral, plural-axis-datuming datum reference structure (the color printhead interface assembly 146A being nudged against the carriage body 28 such that the back and side surfaces of the color printhead interface assembly are fixed against the respective back and side walls of the receptacle 34 provided within the carriage body), a carriage body (28) mounted on, and datumed relative to, the carriage rail, and having an integral, plural-axis-datuming datum-reception site adapted to receive the printhead carrier (receptacles 34 and 36 adapted to receive respective color and mono printhead interface assemblies 146A and 146B), anchoring structure (locator indentions 70, 71 provided on the side wall of the body 38 for mating engagement with the corresponding locator pins 148, 150 of the color printhead interface assembly 146A) configured to anchor the printhead carrier in a generally permanently stabilized

condition to the carriage body with the datum reference structure seated in stabilized contact with the datum-reception site, such anchored and stabilized seating fixedly datuming the printhead carrier relative to the carriage body, and at least one printhead (e.g, color printhead unit 156) mounted on the printhead carrier, and aligned relative to the carriage bearing structure.

With respect to claims 4-6, 10, 13, 18, Askren et al. teaches the datum-reception site defining a socket (receptacle 34 or 36) including at least three mutually orthogonally-related datum surfaces (receptacle 34 having surrounded front wall 38, back wall 40, side wall 42 and opposing side wall 42), the datum-reference structure defines three mutually orthogonally-related datum surfaces, each configured to confrontingly contact a different one of the datum surfaces of the datum-reception site (receptacle 34) with the printhead carrier anchored to the carriage body (the color printhead interface assembly 146A being nudged against the carriage body 28 such that the back and side surfaces of the color printhead interface assembly are fixed against the respective back and side walls of the receptacle 34 provided within the carriage body).

With respect to claims 7, 9, Askren et al. further teaches the printhead (printhead unit 256, Fig. 4) includes ink dispensing nozzles (294), and which further comprises an ink-supply system (ink reservoir 258) configured for fluid connection to the nozzles and for mounting on the carriage body in a manner which, together with the printhead carrier (146), clamps on opposite sides of a mounting-reception structural portion formed integrally with the carriage body, the mounting-reception structural portion at least

partially defining the datum reception site (receptacle 34), and collectively with the printhead carrier and the ink-supply system, forming a clamped, dimensionally-stable, sandwich structure (the receptacle 34 receiving the printhead assembly 24 consisting of both the printhead unit 256 and the printhead interface assembly 146).

The method claims 20 and 21 are deemed to be clearly anticipated by functions of the above structures.

Allowable Subject Matter

4. Claims 3, 11-12, 14, 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for the indication of the allowability of the claimed invention is the inclusion of the limitation, in the combination as currently claimed in each of the claims 3, 11-12, 14, 16-17, that the claimed printing device furnishing datuming capabilities that are both translational and rotational with respect to three mutually orthogonal axes, and which is not found taught or fairly suggested by the prior arts made of record, considered alone or in combination.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (703) 308-1281. The examiner can normally be reached on T-F (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin R. Fuller can be reached on (703) 308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722, (703) 308-7724, (703) 308-7382, (703) 305-3431, (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



HAI PHAM
PRIMARY EXAMINER

December 13, 2003